

WHAT IS CLAIMED IS:

Sub C'

1. An applicator device for a liquid product, the applicator comprising:
a reservoir for containing the liquid product, the reservoir having an opening;
a removable closure member for sealably closing the opening;
an applicator member provided in the reservoir, the applicator member including a first end portion configured to be impregnated with the product and a second end portion, opposite the first end portion, the second end portion including a product application surface and being axially moveable between a first position wherein the second end portion extends out of the reservoir through the opening, and a second position wherein the second end portion is at least substantially contained in the reservoir, the applicator member including at least one block formed of at least one absorbent material capable of being at least partially compressed; and
an elastically compressible support supporting the applicator member in the reservoir, the support having a compressibility greater than the compressibility of the application member.
2. The applicator device of claim 1, wherein the application surface is at least substantially contained in the reservoir when the applicator member is in the second position.

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3. The applicator device of claim 1, wherein the applicator member has a compressibility such that the block becomes compressed during at least one of application of product via the product application surface and placement of the applicator member in the second position.
4. The applicator device of claim 1, wherein the support includes an element that is distinct from the applicator member.
5. The applicator device of claim 1, wherein said support includes a spring.
6. The applicator device of claim 5, wherein the spring is formed of one of plastic and metal.
7. The applicator device of claim 1, wherein the support includes at least one block of an elastically deformable material.
8. The applicator device of claim 7, wherein the support includes a block of foam.
9. The applicator device of claim 8, wherein the block of foam includes one of open cells and semi-open cells.
10. The applicator device of claim 7, wherein the at least one block of elastically deformable material of the support is secured to the applicator member.
11. The applicator device of claim 1, wherein the applicator member is attached to the support.

sub c' 12. The applicator device of claim 11, wherein the applicator member is attached to the support by one of bonding, welding, and crimping.

sub b' 13. The applicator device of claim 1, wherein the support includes a stack of at least two blocks of elastically deformable material, the stack having a compressibility that is greater at an end of the stack adjacent the reservoir than at an opposite end of the stack.

sub c' 14. The applicator device of claim 1, wherein the support has at least one portion integral with the applicator member, said at least one portion being configured to have greater compressibility than the remainder of the applicator member.

15. The applicator device of claim 14, wherein the at least one portion includes an area with a cross-section smaller than a cross-section of the remainder of the applicator member.

16. The applicator device of claim 1, wherein the difference in compressibility between the applicator member and the support results from the presence of an indentation formed on the applicator member on at least part of its periphery.

17. The applicator device of claim 1, wherein the difference in compressibility between the applicator member and the support results from the presence of a central recess formed on the applicator member and extending over at least part of the height of the applicator member.

Subcl 18. The applicator device of claim 1, wherein the applicator member includes at least one passage passing through it.

19. The applicator device of claim 18, wherein the passage is in the form of one of a slit and a fine channel.

20. The container of claim 18, wherein the passage terminates adjacent to the product application surface.

21. The applicator device of claim 1, wherein the applicator member and the support are arranged inside a housing provided at least partially inside a neck of the reservoir, the housing being configured to be in fluid communication with the liquid product in the reservoir.

22. The applicator device of claim 21, wherein the housing is cylindrical in shape.

23. The applicator device of claim 21, wherein the housing has a cross-section having a shape of one of circular, oval, rectangular and polygonal.

24. The applicator device of claim 21, wherein an internal side wall of the said housing includes at least one longitudinal groove.

25. The applicator device of claim 21, further comprising a perforated element separating the housing from the liquid product in the reservoir.

26. The applicator device of claim 25, wherein the perforated element is in the form of one of a grating, a sieve, and a valve.

sub c' > 27. The applicator device of claim 25, wherein the perforated element is configured to provide one-way flow towards the product application surface.

28. The applicator device of claim 1, wherein the product application surface has a concave profile.

29. The applicator device of claim 1, wherein the product application surface has a convex profile.

30. The applicator device of claim 1, wherein the product application surface includes at least one of a dome, a single bevel, and a double bevel.

31. The applicator device of claim 1, wherein the applicator member is formed from a block of one of open-cell foam and semi-open cell foam.

32. The applicator device of claim 1, wherein the applicator member includes, near the product application surface, one of a rigid foam a, perforated element, a woven, a non-woven, a felt, and a mesh.

33. The applicator device of claim 1, wherein the removable closure member is configured such that sealable closing of the opening causes the second end portion of the applicator member to move from the first position to the second position.

34. The applicator device of claim 1, wherein the removable closure member has a profile configured to cooperate in a sealed fashion with a free edge defining the opening.

sub C' 35. The applicator device of claim 1, wherein the a portion of the closure member has a shape substantially the same as the shape of the product application surface.

36. The applicator device of claim 21, wherein the applicator member includes a side wall configured to make sealed contact with an internal wall of the housing in at least in the second position.

37. The applicator device of claim 36, wherein the side wall of the applicator member includes at least one longitudinal groove.

38. The applicator device of claim 1, wherein at least one of the support and the applicator member has open pores or cells of a mean size ranging from 50 μm to 1.5 mm.

39. The applicator device of claim 38, wherein at least one of the support and the applicator member has open pores or cells of a mean size ranging from 700 μm to 1 mm.

40. The applicator device of claim 39, wherein at least one of the support and the applicator member has open pores or cells of a mean size ranging from 0.1 mm to 0.5 mm.

41. The applicator device of claim 1, wherein the reservoir includes a compressible body.

42. The applicator device of claim 41, wherein the compressible body is a deformable tube.

43. The applicator device of claim 41, wherein said body includes at least one elastically deformable portion.

Sub C 14 44. The applicator device of claim 43, wherein the elastically deformable portion is a bellows portion.

45. The applicator device of claim 43, wherein the elastically deformable portion is a diaphragm portion.

N 46. The applicator device of claim 1, wherein the applicator member and the support are mounted on the reservoir via an intermediate member.

N 47. The applicator device of claim 46, wherein the support is mounted on the intermediate member by one of snap-fastening, screwing, bonding, welding, and crimping.

48. The applicator device of claim 1, wherein at least one of the applicator member and the support is made of foam.

49. The applicator device of claim 48, wherein the foam is chosen from polyurethane, polyethylene, polyvinyl chloride, polyether, polyester, natural rubber, and synthetic rubber foams.

N 50. The applicator device of claim 1, further comprising a mixing element inside the reservoir so as to encourage the mixing of the product and to make it easier for the applicator member to become laden with the product.

N 51. The applicator device of claim 50, wherein the mixing element is at least one of a ball and a small weight.

Subcl 52. The applicator device of claim 1, wherein the applicator member is removably mounted in the reservoir.

53. The applicator device of claim 1, wherein the closure member includes an element configured to engage, when the reservoir is closed, the product application surface.

54. The applicator device of claim 53, wherein the element is a block of foam.

55. The applicator device of claim 1, wherein the compressibility of the support is approximately two to four times greater than the compressibility of the applicator member.

56. The applicator device of claim 1, wherein the closure member is one of a screw-on cap and a snap-on cap.

57. The applicator device of claim 1, wherein the closure member is a lid hinged to the opening.

58. The applicator device of claim 57, wherein the lid is hinged to the opening by a film hinge.

59. The applicator device of claim 1, wherein the reservoir contains the product and the product is a cosmetic product.

60. The applicator device of claim 59, wherein the cosmetic product is one of a nail varnish, a liquid lipstick, a make-up remover, a nail varnish remover, a liquid foundation, a cream, a lotion, and an oil.

Subj 61. The applicator device of claim 60, wherein the cosmetic product is in the form of a gel.

62. The applicator device of claim 1, wherein the reservoir contains the product and the product is one of a glue, a correction fluid, and a stain remover.

63. A method of applying a cosmetic product, comprising:
providing the applicator device of claim 1 with a cosmetic product in the reservoir;

pressing on the product application surface of the applicator member to supply the cosmetic product to the applicator member; and

placing the product application surface in contact with an area to be treated to apply the cosmetic product.

64. An applicator device for a liquid product, the applicator comprising:
a reservoir for containing the liquid product, the reservoir having an opening;
and

an absorbent member provided in fluid communication with the reservoir, the absorbent member comprising at least two portions, a first application portion configured to apply the liquid product to a surface to be treated, and a second support portion configured to elastically support the first portion, wherein the first portion has a different density than the second portion.

Sub C 65. The applicator device of claim 64, further comprising a removable closure member for sealably closing the opening.

66. The applicator device of claim 64, wherein the first and second portions are integrally formed.

67. The applicator device of claim 64, wherein at least one of the support portion and the application portion has open pores or cells of a mean size ranging from 50 μm to 1.5 mm.

68. The applicator device of claim 67, wherein at least one of the support and the applicator member has open pores or cells of a mean size ranging from 700 μm to 1 mm.

69. The applicator device of claim 68, wherein at least one of the support and the applicator member has open pores or cells of a mean size ranging from 0.1 mm to 0.5 mm.

70. The applicator device of claim 64, wherein the reservoir includes a compressible body.

71. The applicator device of claim 70, wherein the compressible body is a deformable tube.

72. The applicator device of claim 70, wherein said body includes at least one elastically deformable portion.

73. The applicator device of claim 64, wherein the support portion has a greater compressibility than a compressibility of the application portion.

Sub c1 74. The applicator device of claim 64, wherein the application portion of the absorbent member is movable between a first position wherein the application portion extends out of the reservoir through the opening and a second position, wherein the application portion is at least substantially contained in the reservoir.

Sub B1 75. The applicator device of claim 64, wherein the absorbent member is compressible.

Sub c1 76. The applicator device of claim 64, wherein the support portion is attached to the application portion.

77. The applicator device of claim 64, wherein the support portion includes at least one block of an elastically deformable material.

78. The applicator device of claim 77, wherein the support portion includes a block of foam.

79. The applicator device of claim 78, wherein the block of foam includes one of open cells and semi-open cells.

Sub 2 80. The applicator device of claim 64, wherein the support portion includes a stack of at least two blocks of elastically deformable material, the stack having a compressibility that is greater at an end of the stack adjacent the reservoir than at an opposite end of the stack adjacent the application portion.

sub cl 81. The applicator device of claim 64, wherein the support portion includes a recessed portion.

✓ 82. The applicator device of claim 81, wherein the application portion includes a central passage connecting with the recessed portion of the support portion.

✓ 83. The applicator device of claim 64, wherein the absorbent member includes a central passage through it.

84. The applicator device of claim 64, wherein the reservoir contains the liquid product and the liquid product is a cosmetic product.

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